

1100 Series

Clock oscillator, 14 pin DIL package, HCMOS/TTL



REACH and RoHS compliant
Excellent range of frequency stabilities available



Parameters		Specification	Remarks
Frequency range	F _{nom}	250.0kHz ~ 60.0MHz	
Supply voltage	V _{cc}	3.3V, 5.0V	±5% tolerance
Frequency stability (all causes)	F _{stb}	±25.0ppm ~ ±100.0ppm	Includes stability over temperature + Load + V _{cc} + Shock and vibration, Table 1
Aging	F _{age}	±3.0ppm max	25°C, 1gt year
Operating temperature range (°C)	T _{opr}	0°C ~ +70°C to -40°C ~ +85°C	Table 1
Storage temperature (°C)	T _{stg}	-55°C ~ +125°C	
Output waveform		HCMOS, TTL	
Output load		15pF typical, 30pF, 50pF, 10TTL	
Output voltage high	V _{oh}	HCMOS: 90% V _{cc} min ; TTL: 2.4V min	
Output voltage low	V _{ol}	HCMOS: 10% V _{cc} max ; TTL: 0.4V max	
Rise time	T _r	5.0nsec (max)	Measured over 10% to 90% of waveform
Fall time	T _f	5.0nsec (max)	
Duty cycle		45%/55%, 40%/60%	Measured at 50% of waveform
Current consumption	I _{cc}	Table 2	
Start-up time	T _{str}	10.0msec max	
Moisture sensitive level	MSL	1	
ESD sensitive device		Yes	

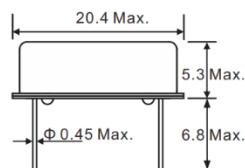
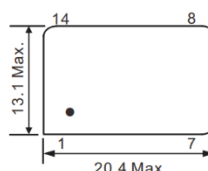
Table 1. Frequency stabilities vs Operating temperature range

Temperature (°C)				
	±25.0	±30.0	±50.0	±100.0
0 ~ +70	✓	✓	✓	✓
-10 ~ +70	✓	✓	✓	✓
-20 ~ +70	✓	✓	✓	✓
-30 ~ +85	✓	✓	✓	✓
-40 ~ +85	✓	✓	✓	✓

Table 2. Current consumption (mA max)

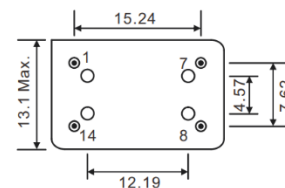
Frequency	Supply voltage	
	3.3V	5.0V
250.0kHz ~ 9.999MHz	15.0mA	10.0mA
10.000MHz ~ 23.999MHz	15.0mA	10.0mA
24.000MHz ~ 49.999MHz	30.0mA	20.0mA
50.000MHz ~ 79.999MHz	40.0mA	20.0mA
80.000MHz ~ 156.000MHz	50.0mA	30.0mA

Dimensions(Unit:mm)



Pin Connections

Pin No.	Connection
1	OE (Output Enable)
7	GND
8	Output
14	Vdd



1100 Series

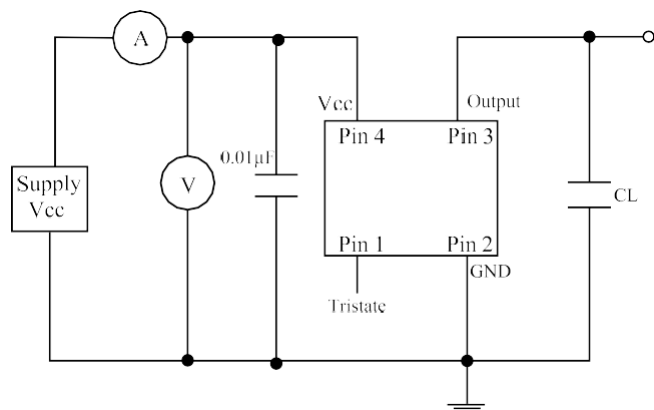
Clock oscillator, DIL 14 package, HCMOS/TTL



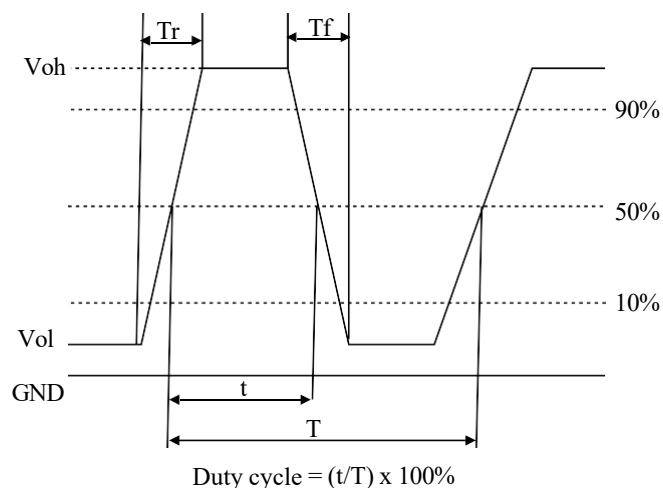
Part number generation								
V	2600	B	B	I	S	E	P	-PF
ACT series Code	Frequency (MHz)	Frequency stability (±ppm)	Supply voltage (V)	Operating temp. range (°C)	Duty Cycle (%/%)	Output wave	Tristate	RoHS Code
V	< 100MHz First 4 digit of frequency > 100MHz First 5 digit of frequency Ex. 26.00MHz = 2600 8.00MHz = 0800 14.7456MHz = 1474	25 = C 30 = H 50 = B 100 = A	3.3 = B 5.0 = A	-0 ~ +70 = E -10 ~ +70 = C -20 ~ +70 = B -30 ~ +85 = P -40 ~ +85 = I	40/60 = S 45/55 = H	HCMOS 15pF = E HCMOS 30pF = Q HCMOS 50pF = U TTL = H 15pF HCMOS/10TTL - Universal = J	Tristate = P None = N	-PF

Note: It is important to suffix the above part number with full frequency required to give a completed part number as illustrated below. Full Example part number : **V2600BBISEP-PF [26MHz]**, **V1474BBISEP-PF [14.7456MHz]**

HCMOS Test circuit



HCMOS wave form



Drawing control: (Internal use only)
 Commodity code:
 854370 90 45 for 1.8MHz ~ 67MHz
 854370 90 99 for <1.8MHz or >67MHz
 Issue number : N1
 Date : 01/02/2017
 Internal reference : SCL